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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,788

06/01/2006

Dimitris Katsoulis

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SUITE 1300

DAYTON, OH 45402-2023

EXAMINER

NAKARANI, DHIRAJLAL S

ART UNIT

PAPER NUMBER

1787

MAIL DATE

DELIVERY MODE

07/15/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,788	Applicant(s) KATSOU LIS ET AL.	
	Examiner D. S. Nakarani	Art Unit 1787	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>06/14/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-8, 10-17 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nozue et al (U. S. Patent 4,626,556) in view of Yagihashi (U. S. Patent 6,340,735 B1), Aiba et al (U. S. Patent 5,183,846), Linde et al (U. S. Patent 5,043,789) and Li et al (U. S. Patent Application Publication US 2003/0171476 A1) for the reasons of record set forth in paragraph 5 of the Office Action mailed April 01, 2009 (Paper Number 20090328). In addition, Nozue et al disclose a heat resistance of the organopolysilsesquioxane from about 600° to 650° C (Col. 6, lines 40-49). Nozue et al disclose heat resistance of cross linked organopolysilsesquioxane up to 800° C (Example 13).
3. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Paquet et al (U. S. Patent 5,822,675) for the reasons of record set forth in paragraph 4 of the Office Action mailed December 08, 2009 (Paper Number 20091206).
4. Receipt of Information Disclosure Statement filed June 14, 2010 is acknowledged and all recited documents are considered and made of record.

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5. Applicant's arguments filed May 07, 2010 have been fully considered but they are not persuasive. In reference to rejection of claims 1-8, 10-17 and 19-22 under 35 U.S.C. 103(a) as being unpatentable over Nozue et al (U. S. Patent 4,626,556) in view of Yagihashi (U. S. Patent 6,340,735 B1), Aiba et al (U. S. Patent 5,183,846), Linde et al (U. S. Patent 5,043,789) and Li et al (U. S. Patent Application Publication US 2003/0171476 A1), applicants mainly argue that the claimed network polymer structures are amorphous and exhibit excellent resistance to high temperature and resist cracking from flexing better than crystalline ladder structures. Applicants state that the Examiner's assertion "claimed invention does not exclude ladder polymer(s)" is not understood. The claimed invention explicitly requires a "network structure" and points to page 4, paragraph [0010]. None of the prior art references cited teach or suggest claimed network structure, all of the references teach ladder polymers which are inherently crystalline.

These arguments are unpersuasive because the invention as claimed does not require amorphous polymer as argued. The claimed formula of silsesquioxane polymer, when value of $x = 1.0$, it is a ladder polymer structure similar to the prior art polymer. There is nothing on record showing that Nozue et al's cross-linked polymer (e.g. Example 13) is a crystalline and does not have claimed "network structure" and claimed "temperature resistance". There is nowhere in the instant disclosure stated or shown that the claimed polymer is an amorphous polymer.

In reference to rejection of claims 1-22 under 35 U.S.C. 102(b) as being anticipated by Paquet et al (U. S. Patent 5,822,675), applicants mainly argue that

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Paquet et al are silent concerning the crystalline structure of methylphenyl silicone polymers described therein, their resistance to temperature of 550° C, and their resistance to cracking.

These arguments are unpersuasive because the Examiner is unable to find in the instant disclosure that the claimed polymer is an amorphous polymer. The structural formula of polymer claimed in claims 9 and 18 is the same as disclosed by Paquet et al. Therefore the polymer disclosed by Paquet et al inherently deemed to have all claimed properties unless shown otherwise. There is no showing how claimed polymer defers from the polymer disclosed by Paquet et al.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. Nakarani whose telephone number is (571) 272-1512. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie E. Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/D. S. Nakarani/
Primary Examiner, Art Unit 1787**

DSN
July 12, 2010.